

Notice of Allowability	Application No.	Applicant(s)	
	10/729,779	FENG ET AL.	
	Examiner	Art Unit	
	My-Trang N. Ton	2816	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Tel. Int. 03/04/05.
2. ☒ The allowed claim(s) is/are 1-20.
3. ☒ The drawings filed on 04 December 2003 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date <u>03/04/05</u> . |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date <u>12/04/03</u> | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Att. Steinberg on March 4, 2005.

The application has been amended as follows:

In the specification

In the specification, page 4, line 2, after "Ser. No.", insert -- 10/692,192 --.

In the claims

In claim 3, line 11, before "RTPCS", delete – second --.

In claim 6, line 1, after "buffer", delete – control --.

In claim 12, line 1, replace "9" with – 8 --.

In claim 13, line 1, replace "13" with – 6 --.

In claim 15,

line 9, after "and" (first occurrence), replace "a" with – an --;

line 17, before "P", replace "an" (both occurrence) with – a --.

In claim 17,

line 3, after "first", insert – inverter --.

Reasons for allowance

The following is an examiner's statement of reasons for allowance:

The present invention is drawn to a dual edge programmable delay unit utilizing a buffer circuit, a variable fall time control input, a variable rise time control input, a Fall Time Programmable Control Source, a Rise Time Programmable Control Source, or a buffer control circuit, a P Side Programmable Current source, an N side latch, an N side Programmable Current source, an P side latch, an N side control word, an N side write signal, P side control word and P side write signal recited in claims 1-20. None of the prior art disclosed or suggested to show the particular structure and/or the particular operation recited in these claims namely: "providing a variable fall time control input", "providing a variable rise time control input", "providing a Fall Time Programmable Control Source (FTPCS) for programming a variable FTPCS signal to said buffer circuit as a function of said fall time control input", "providing a Rise Time Programmable Control Source (FTPCS) for programming a variable RTPCS signal to said buffer circuit as a function of said rise time control input" in combination with "buffer circuit providing said buffer output signal with a fall time delay between said input signal fall time and said output signal fall time as a function of said variable FTPCS signal" and "buffer circuit providing said buffer output signal with a rise time delay between said input signal rise time and said output signal rise time as a function of said variable RTPCS signal" as recited in claim 1; the combination of "providing a buffer control circuit", "providing an P Side Programmable Current (PSPC) source ...", "providing an N side (NS) latch ... N side control word", "NS latch providing outputs of N side switching signals ... input of

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said PSPC source", "providing an N side Programmable Current ... said NSPC connection line", "providing an P side (PS) latch ... function of said P side control word" and "PS latch providing outputs of P side switching signals ... input of said PSPC source" as recited in claim 15; the combination of "the buffer circuit", "the variable fall time control input", "the variable rise time control input", "the Fall Time Programmable Control source" and "a Rise Time Programmable Control Source" as recited in claim 20.


The prior art references submitted by the applicant on IDS form received on 12/04/03 was reviewed and considered. These references (e.g. U.S Patent No. 5,936,451) appear to be the best references with respect to the claimed invention and closely matched most of the references found during the examiner's searches. However, as noted above, the combination method steps recited in claims 1 and 15, and the combination of all elements recited in claim 20 are not disclosed. Therefore, the claims are patentably distinct over all these prior art references of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to My-Trang N. Ton whose telephone number is 571-272-1754. The examiner can normally be reached on 7:00 a.m - 5:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Callahan can be reached on 571-272-1740. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



My-Trang N. Ton
Primary Examiner
Art Unit 2816

March 4, 2005